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# **Candidate Preparation for Physical Abilities Testing for Entry-Level Selection**

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## **INTRODUCTION**

In the entry-level selection process, the Agency is seeking qualified individuals who can successfully and safely perform the essential functions of the Trooper position. These guidelines provide candidates with information about the physical requirements and testing for selection into entry-level sworn officer positions in the Nebraska State Patrol. To be eligible for hire, you will be required to perform the following exercises and meet the standards outlined in these guidelines on the day of testing.

## **OVERVIEW OF PHYSICAL TESTING PROCEDURES**

Six exercises will be conducted in the order shown below:

1. Body Mass Index (BMI)
2. Handle Weapons
3. Scale Lift & Carry
4. Run With Obstacle
5. Dummy Drag
6. 1.5 Mile Run

You must pass each of the exercises to be able to participate further in the process. If you do not meet the standards set by the Nebraska State Patrol, you will *not* be allowed to continue in the selection process. The specific test procedures and standards that you are required to meet are described in the following sections. It is to your advantage to be as familiar as possible with these guidelines, so that you know exactly what will be expected of you on the day of testing.

## **WHAT TO WEAR**

You should wear comfortable clothes (e.g., shorts, t-shirt, sweat suit, etc.) based on the weather conditions on the day of testing, as the exercises may be performed outdoors. Also, be sure to wear shoes that are comfortable for running. Test administrators may need access to the skin on your upper body, mid-section, and thigh to take skinfold measurements (refer to the following section regarding BMI), so take that into consideration when selecting your clothing.

## **WORDS OF CAUTION**

Your safety is of utmost importance during the physical abilities testing process. If for some reason you do not feel that you can safely perform any of the exercises described in these guidelines, please tell the test administrator immediately.

## **1. BODY MASS INDEX (BMI)**

Body Mass Index (BMI) is the ratio of weight to height and is used to define standards of overweight and obesity. “Overweight” is defined as a BMI of 25 kg/m<sup>2</sup> or over, and “obese” is defined as a BMI of 30 kg/m<sup>2</sup> or over. These standards are generally accepted by the U.S. government and throughout the world by the medical and scientific communities. There is substantial evidence that a number of health risks increase at a higher rate in individuals with a BMI at or over 25 kg/m<sup>2</sup>.

### **REQUIRED STANDARD**

Candidates are required to meet a standard of BMI less than 30 kg/m<sup>2</sup>. This means that candidates must have a BMI of 29 kg/m<sup>2</sup> or less based on the weight and height measurements taken on the day of testing. Alternatively, it is acceptable for candidates whose BMI is higher than 29 kg/m<sup>2</sup> to meet body fat standards of 25% or less for men and 32% or less for women.

### **TEST PROCEDURES**

Accurate measurements of your current weight (in pounds) and height (in feet and inches) will be taken at the test site. Your BMI will be calculated from these measurements using the formula explained below. If your BMI is 30 kg/m<sup>2</sup> or higher, skinfold measurements will be taken (at specific locations on your upper body, mid-section, and thigh) to determine your percentage body fat. Acceptable body fat standards are a maximum of 25% for men and a maximum of 32% for women. If your body fat percentage falls at or below these standards, you will pass the BMI test. If your body fat percentage is higher than these standards, you will *not* pass the BMI test. You may be referred to an expert in body fat testing chosen by the Nebraska State Patrol to have another measure of your body fat percentage performed using different procedures.

### **CANDIDATE PREPARATION**

Take accurate measurements of your current weight (in pounds) and height (in feet and inches). You can calculate your exact BMI using the following formula:

$$\text{BMI} = \text{weight (kg)} / \text{height squared (m}^2\text{)}$$

To use the formula, you need to convert your weight and height into metric measurements. Multiply your weight in pounds by .45 to obtain your weight in kilograms (kg). To convert feet and inches into meters (m), first multiply the number of feet by 12, and then add the additional inches to obtain height in total inches. Multiply

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total inches by .0254 to obtain height in meters. Multiply your height in meters by the same number (height in meters) to obtain height in meters squared ( $m^2$ ). To calculate BMI, divide your weight in kilograms (kg) by your height in meters squared ( $m^2$ ). This number should be at or below 29 to meet the standards set by the Agency.

Alternatively, you can refer to the chart printed on the following page to obtain a close estimate of your BMI. To use the chart, find your height in the far left-hand column. Move across in that row to find the column where your approximate weight is listed (in pounds) at the top. The number at the intersection is your BMI at that height and weight. (Note: Pounds have been rounded off.)

BMI can be reduced by only by reducing your weight-to-height ratio; that is, by losing weight that is attributed to body fat. If your BMI is over  $29 \text{ kg}/m^2$ , and your percentage body fat is over 25% for men or over 32% for women, you will need to lose body fat (i.e., diet and exercise) in order to be eligible for selection into the Nebraska State Patrol.

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		WEIGHT (pounds)																					
		120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330
Height (feet/inches)	4'5"	30	33	35	38	40	43	45	48	50	53	55	58	60	63	65	68	70	73	75	78	80	83
	4'6"	29	31	34	36	39	41	43	46	48	51	53	56	58	60	63	65	68	70	72	75	77	80
	4'7"	28	30	33	35	37	40	42	44	47	49	51	54	56	58	61	63	65	68	70	72	75	77
	4'8"	27	29	31	34	36	38	40	43	45	47	49	52	54	56	58	61	63	65	67	70	72	74
	4'9"	26	28	30	33	35	37	39	41	43	46	48	50	52	54	56	59	61	63	65	67	69	72
	4'10"	25	27	29	31	34	36	38	40	42	44	46	48	50	52	54	57	59	61	63	65	67	69
	4'11"	24	26	28	30	32	34	36	38	40	43	45	47	49	51	53	55	57	59	61	63	65	67
	5'0"	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55	57	59	61	63	65
	5'1"	23	25	27	28	30	32	34	36	38	40	42	44	45	47	49	51	53	55	57	59	61	62
	5'2"	22	24	26	27	29	31	33	35	37	38	40	42	44	46	48	49	51	53	55	57	59	60
	5'3"	21	23	25	27	28	30	32	34	36	37	39	41	43	44	46	48	50	51	53	55	57	59
	5'4"	21	22	24	26	28	29	31	33	34	36	38	40	41	43	45	46	48	50	52	53	55	57
	5'5"	20	22	23	25	27	28	30	32	33	35	37	38	40	42	43	45	47	48	50	52	53	55
	5'6"	19	21	23	24	26	27	29	31	32	34	36	37	39	40	42	44	45	47	49	50	52	53
	5'7"	19	20	22	24	25	27	28	30	31	33	35	36	38	39	41	42	44	46	47	49	50	52
	5'8"	18	20	21	23	24	26	27	29	30	32	34	35	37	38	40	41	43	44	46	47	49	50
	5'9"	18	19	21	22	24	25	27	28	30	31	33	34	36	37	38	40	41	43	44	46	47	49
	5'10"	17	19	20	22	23	24	26	27	29	30	32	33	35	36	37	39	40	42	43	45	46	47
	5'11"	17	18	20	21	22	24	25	27	28	29	31	32	34	35	36	38	39	41	42	43	45	46
	6'0"	16	18	19	20	22	23	24	26	27	29	30	31	33	34	35	37	38	39	41	42	43	45
6'1"	16	17	19	20	21	22	24	25	26	28	29	30	32	33	34	36	37	38	40	41	42	44	
6'2"	15	17	18	19	21	22	23	24	26	27	28	30	31	32	33	35	36	37	39	40	41	42	
6'3"	15	16	18	19	20	21	23	24	25	26	28	29	30	31	33	34	35	36	38	39	40	41	
6'4"	15	16	17	18	20	21	22	23	24	26	27	28	29	30	32	33	34	35	37	38	39	40	
6'5"	14	15	17	18	19	20	21	23	24	25	26	27	29	30	31	32	33	34	36	37	38	39	
6'6"	14	15	16	17	19	20	21	22	23	24	25	27	28	29	30	31	32	34	35	36	37	38	
6'7"	14	15	16	17	18	19	20	21	23	24	25	26	27	28	29	30	32	33	34	35	36	37	
6'8"	13	14	15	17	18	19	20	21	22	23	24	25	26	28	29	30	31	32	33	34	35	36	
6'9"	13	14	15	16	17	18	19	20	21	23	24	25	26	27	28	29	30	31	32	33	34	35	
6'10"	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	34	35	

## **2. HANDLE WEAPONS**

Sworn officers in the Nebraska State Patrol are required to certify in the use of weapons according to state requirements. During training, recruits are taught specific weapon handling techniques, which you are *not* expected to demonstrate during the selection testing. The purpose of this exercise is simply to ensure that candidates have the physical capability to hold and operate a handgun and a shotgun.

### **REQUIRED STANDARD**

Candidates are required to pick up and hold a handgun, and to demonstrate pulling the trigger and working the slide of the handgun three times with each hand. Candidates also are required to pick up and hold a shotgun, and to demonstrate pulling the trigger and working the forearm of the shotgun three times. If you are not able to complete this exercise successfully, you will *not* continue in the selection process.

### **TEST PROCEDURES**

Before starting, you will be given instructions on what you are asked to do in this exercise. Just prior to each test (handgun and shotgun), an administrator will demonstrate the proper method of picking up, holding in proper position, and operating the weapon, including pulling the trigger and working the slide or the forearm of the weapon. (Note: For safety purposes, the weapons will *not* be loaded. No ammunition will actually be fired.)

**Handgun:** Using your right hand, you will pick up the handgun from the table. Bring it to proper firing position and pull the trigger of the handgun, work the slide and pull the trigger a second time, then work the slide and pull the trigger a third time. The handgun will be “fired” a total of three (3) times. Replace the handgun on the table. Repeat this process using the left hand.

**Shotgun:** On the command “Go,” you will pick up the shotgun from the table and hold it in proper firing position for 20 seconds. On the command “Fire,” you will pull the trigger of the shotgun, work the forearm and pull the trigger a second time, then work the forearm and pull the trigger a third time. The shotgun will be “fired” a total of three (3) times. Replace the shotgun on the table.

### **CANDIDATE PREPARATION**

You will be allowed to practice picking up and holding the weapons on the day of testing before you are required to complete this exercise.

### **3. SCALE LIFT & CARRY**

Sworn officers in the Nebraska State Patrol are sometimes required to lift and carry heavy objects. The purpose of this exercise is to ensure that candidates have the physical capability to lift and carry typical items that are lifted and carried on the job.

#### **REQUIRED STANDARD**

Candidates are required to grasp two 45-pound scales (total of 90 pounds) by the handles, lift them from the ground, and carry them a distance of 30 feet. There is no time limit. However, once the scales are lifted, the carrying movement must be continuous to reach the 30-foot finish line. Candidates are not allowed to set the scales down and rest during the exercise. If you are not able to complete this exercise successfully, you will *not* continue in the selection process.

#### **TEST PROCEDURES**

Before starting, you will be given instructions on what you are asked to do in this exercise. Two 45-pound scales will be positioned at the starting point. On the command “Go,” you will bend over or stoop to pick up the two scales by the handles, one in each hand. Carry the scales to the marked finish line 30 feet away, walking at a pace that is comfortable and safe for you—this is *not* a race. The walk must be continuous, with no stopping to rest. At the end point, set the scales down carefully. Please do not drop them!

#### **CANDIDATE PREPARATION**

You will be allowed to practice picking up and carrying the scales a short distance on the day of testing before you are required to complete this exercise.

## **4. RUN WITH OBSTACLE**

Sworn officers in the Nebraska State Patrol are sometimes required to run at full speed and to jump down from and over obstacles (e.g., while pursuing subjects on foot, to reach a victim in a threatening situation, etc.). The purpose of this exercise is to determine that candidates can run and jump at a pace that is required by situations encountered on the job.

### **REQUIRED STANDARD**

Candidates are required to jump down from a 2-foot platform, run a total distance of 100 feet, jump across a 4-foot wide obstacle on the ground, and end by crouching behind an object. There is a 12-second time limit. You must complete the entire exercise in 12 seconds or less. If you are not able to complete this exercise successfully, you will *not* continue in the selection process.

### **TEST PROCEDURES**

Before starting, you will be given instructions on what you are asked to do in this exercise. You will stand ready on top of the 2-foot platform. At the command “Go,” you will jump down from the platform and begin running toward a marked distance 50 feet away. Mid-way across this distance will be a marked area on the ground (simulating a hole or ditch). Upon reaching this obstacle, jump across the 4 foot distance without stepping inside the marked area. Continue running to the marked 50 foot distance, turn around without stopping, and run back to the starting platform—you do *not* need to jump over the obstacle on the return run. Upon reaching the platform, crouch down behind it. Total running distance is 100 feet. You will be timed using a stopwatch, starting at the command “Go” and ending when you crouch behind the platform.

### **CANDIDATE PREPARATION**

You will be given an opportunity to stretch or warm up before completing this exercise. You may want to set up a similar exercise to practice on *before* the day of testing. Have someone time you to get a feel for how fast you will need to run. You will be able to see, but not practice, the exercise before you are required to complete it at the testing site.

## **5. DUMMY DRAG**

Sworn officers in the Nebraska State Patrol are sometimes required to drag victims, animals, and heavy objects while performing their job duties. The purpose of this exercise is to determine that candidates can drag a human-shaped object of a typical size and weight at a pace that is required by situations encountered on the job.

### **REQUIRED STANDARD**

Candidates are required to grasp a 165-pound dummy and drag it a distance of 39 feet. There is a 20-second time limit. You must complete the entire exercise in 20 seconds or less. If you are not able to complete this exercise successfully, you will *not* continue in the selection process.

### **TEST PROCEDURES**

Before starting, you will be given instructions on what you are asked to do in this exercise. The dummy will be positioned with its head at the starting point and the rest of its body pointed away from the finish line. You will stand ready at the starting point, facing the dummy with your back to the finish line. At the command “Go,” grasp the dummy from behind under the arms and lift it to whatever position is comfortable for you to drag it. (Note: You do *not* have to lift the dummy to any particular height. Just lift it to the point where you can hold it securely enough to drag it.) Drag the dummy backwards until the dummy’s feet pass the 39-foot finish line, and lay it down. You will be timed using a stopwatch, starting at the command “Go” and ending when the whole dummy crosses the 39-foot finish line.

If you happen to lose your grip or drop the dummy during the drag, you will need to grasp it again and continue dragging as quickly as possible to finish in the 20-second time limit. If you decide that picking the dummy up from behind again is too time consuming, you may grab it by the arm or leg or however you can to continue dragging it. In this exercise, speed (not form) is the primary issue. Any means you use to ultimately drag the dummy across the finish line in 20 seconds or less is acceptable.

### **CANDIDATE PREPARATION**

You will be allowed to practice lifting and dragging the dummy on the day of testing before you are required to complete this exercise. You should practice enough to get a feel for how heavy the dummy is and how you are best able to grasp and drag it. However, do not practice so much that you are tired out when the time comes for you to be tested.

## **6. 1.5 MILE RUN**

Maintaining an acceptable level of fitness is important for sworn officers in the Nebraska State Patrol for a number of reasons. Many of the job duties that Troopers perform require physical exertion (e.g., walking or running, standing or driving for long periods of time, lifting, carrying, dragging, jumping, crouching, etc.). In addition, fitness has a significant impact on overall health and wellbeing, which benefits the individual officers, the Agency, and the citizens who are served by and support the Nebraska State Patrol. This exercise is *not* intended to impose requirements for extreme fitness or to select the most fit individuals. Rather, the purpose of this exercise is to determine that candidates can demonstrate a very basic, minimal level of fitness, which is required for general health and ability to perform the Trooper job duties safely.

### **REQUIRED STANDARD**

Candidates are required to run one and one-half (1.5) miles in a time limit that is determined based on gender and age. Refer to the following table for the time limits (in minutes and seconds) for each group:

<b><u>Age Group</u></b>	<b><u>Men</u></b>	<b><u>Women</u></b>
20–39 years old	15:10	18:30
40–49 years old	16:00	19:20
50–59 years old	17:30	20:45

These time limits are based on extensive research data from studies of fitness levels in the general population, including law enforcement data. In addition, detailed analyses of the entry-level sworn officer job in the Nebraska State Patrol were used in setting the time limits for the 1.5 Mile Run. If you are not able to complete this exercise successfully, you will *not* continue in the selection process.

### **TEST PROCEDURES**

Before starting, you will be given instructions on what you are asked to do in this exercise. You will stand ready at the starting point. At the command “Go,” you will run, jog, walk, or any combination of these until you reach the finish line indicating 1.5 miles. You may even pause to rest, as long as you are able to cover the entire distance within the appropriate time limit (refer to table above). You will be timed using a stopwatch, starting at the command “Go” and ending when you cross the 1.5-mile finish line.

**CANDIDATE PREPARATION**

You will be given an opportunity to stretch and warm up before you are required to complete this exercise on the day of testing. You may want to do a few practice runs *before* the day of testing. Time yourself to get a feel for how fast you will need to run the 1.5 miles in order to complete the exercise within the time limit set for your gender and age group.